

- Ad C3*
9. (First Amended) The fast food service window set forth in claim 3
wherein the sensor has an integral emitter and receiver.
10. (First Amended) The fast-food service window set forth in claim 3
wherein [at least one of] the infrared sensor[s] emits an infrared beam
at an angle [just slightly] askew of the vertical plane.
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Ad C4

REMARKS

The applicant wishes to thank the Examiner for his thorough review of the application and for his instructive and thoughtful comments. The Examiner's specific comments and suggestions are sincerely appreciated and were of significant help to the Applicant. The specification, drawings, and claims have been amended to address the Examiner's comments.

Claims 1-10 remain in the application. Reconsideration of the application and claims, as amended, is requested.

The claims stand rejected under 35 U.S.C. section 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant has revised the claims to more particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims further stand rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art of Figure 5 in view of Boiucaner. The claims stand rejected on the basis of a prior art window described in Figure 5 combined with Boiucaner's implementation of a plurality of integral infrared emitters and sensors with centerlines slightly askew of the vertical axis.

The 103(a) rejection is based on impermissible hindsight reconstruction solely with the benefit of the invention disclosed in the Applicant's patent application. There is no suggestion in Boiucaner that the infrared sensors be focused in any other manner other than downward. Indeed all of the art cited in the First Office

Action discloses the use of downwardly focused proximity detectors or detectors on the sides of the doors to be opened.

In fact Figure 5, describes the Applicant's previous attempt to use side-mounted infrared detectors to operate the fast food service window and is somewhat analogous to that described in Jonsson (U.S. Patent 5,276,391). The prior art device set forth in Figure 5 of the applicant's application failed because the posture and stance of the clerk as food was passed through the window caused the beam between the emitter and the sensor to be reestablished thereby closing the window at the time that the food was being passed to the customer. The prior art device shown in Figure 5 is nothing but an implementation of Jonsson, albeit it with different sensors and emitters. Even if Boiucaner were to be combined with Jonsson, the resulting implementation would be a device such as that shown in Figure 5 with a plurality of emitter/sensors with two broad detection zones – one to detect traffic approaching the window and one to detect traffic in the threshold of the window. This result would be completely unsatisfactory since the Applicant is attempting to minimize the nuisance opening the window, specifically, the Applicant wishes to avoid opening of the window when a clerk is merely in the vicinity of the window. The Applicant's invention is specifically directed to opening the window only when the clerk is desirous of passing food and/or other merchandise through the window to a waiting customer or attempting to transact business with the waiting customer.

Boiucaner clearly teaches the use of a plurality of **downwardly focused** infrared devices. The purpose of a plurality of devices, however is very different. Boiucaner teaches the use of one set of infrared devices to "sense traffic approaching the doorway" (column 1 at line 8) and the second set of devices to detect traffic "in the vicinity of the door threshold" (column 1 at line 9). Boiucaner also specifically describes the use of **downwardly focused** sensors for sliding doors as follows: "For sliding door applications, three separate sensor units are commonly employed. Two approach sensors are positioned for coverage at each side of the sliding door, and a threshold or safety sensor covers the threshold area in which the moving door panels travel." (column 1 at line 17-22)

It is respectfully submitted that Boiucaner teaches away from the Applicant's invention for two reasons: (1) Boiucaner teaches the use of downwardly focused

sensors which is diametrically opposed to Applicant's use of upwardly focused sensors and (2) Boiucaner teaches use of sensors to detect traffic in the vicinity of the door and traffic in the threshold of the door. It is submitted that use of Boiucaner's teachings for a fast food service window would have caused a nuisance and unwanted openings of the window, a problem that Applicant had to avoid, specifically, having the fast food service window open whenever there was personnel "in the vicinity of the window" since this would have caused the window to open inadvertently. Furthermore, the triggering of the window when there was traffic in the threshold would have likewise been problematic even if one were to assume that food passed from the clerk to the customer constituted "traffic" because some of the business to be conducted by the customer and clerk would have necessitated discussions and conversation without the passing of food or merchandise through the window which would have resulted in an inadvertent closing of the window.

The Applicant submits that even with the benefit of the teachings of Boiucaner and Jonsson, the industry has wholly failed to produce a satisfactory product such as the service window disclosed by the Applicant. While there have been many attempts such as those disclosed in Figure 5, the prior art has taught away from upwardly focused devices and instead has taught downward and side-to-side emitter/sensors.

The Applicant notes the examiner's objection to the informal drawings. Formal drawings will be submitted at the time that the Examiner has indicated that there is allowable subject matter at which time the deficiencies noted by the Examiner with respect to line width and weight, will be addressed.

With respect to the Examiner's request that the motor operator assembly be shown in Figure 1, the applicant does not propose to amend the drawings given the description in the specification beginning at page 9 line 19 and in view of the ease with which one skilled in the art can implement a motor operator to a sliding window.

Additionally, Applicant respectfully submits that it is not necessary to amend the drawings to show the motor operator in view of the requirements of 37 CFR 1.81, which recites in part

Drawings required in patent application.

- (a) The applicant for a patent is required to furnish a drawing of his or her invention *where necessary for the understanding of the subject matter* sought to be patented [emphasis added];
- (b) Drawings *may include illustrations which facilitate an understanding* of the invention (for example, flow sheets in cases of processes, and diagrammatic views) [emphasis added].

Although the Examiner has the discretion to request Applicant to prepare a drawing pursuant to 37 C.F.R. 1.81 (c), set forth below:

- (c) Whenever the nature of the subject matter sought to be patented admits of illustration by a *drawing without its being necessary for the understanding of the subject matter and the applicant has not furnished such a drawing, the examiner will require its submission within a time period of not less than two months from the date of the sending of a notice thereof* [emphasis added].

The Applicant respectfully submits that a drawing is not required to understand the subject matter and reconsideration is respectfully requested. In the event the Examiner requires the Applicant to submit a drawing pursuant to 37 C.F.R. 1.81 1.81 (c), the Applicant will prepare a schematic representation with the elements disclosed in the specification at page 9, line 19.

With respect to the symbol “ α ” shown in the drawings, the specification calls for an angle “alpha”. The Greek symbol for “alpha” is “ α ”. The amendment to the

specification wherein the symbol “ ∞ ” was substituted for the word “alpha” should adequately address the Examiner’s comment.

Every attempt has been made to place this Application in condition for allowance. Reconsideration is respectfully requested and favorable action is requested.

This response was to have been filed on January 15, 1999, 3 months after the mailing of the office action. A one-month extension is requested. The extension fee of \$55.00 and a petition for extension has been attached to this response. With the one-month extension, this response is due on or before February 15, 1999.

In the event that a telephone conference would expedite allowance of this application, the Examiner is urged to contact the undersigned at 713-374-2634.

Respectfully submitted,



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